## FEDERALLY ENFORCEABLE STATE OPERATING PERMIT

## PERMITTEE

Curtis Metal Finishing Company

Attn: David Scott 6645 Sims Drive

Sterling Heights, Michigan 48313-3726

Applicant's Designation: LINE 75 Date Received: December 3, 2002

<u>Subject</u>: Lines 71, 72, 73 and 74, E-Coat Dip Line, Phosphate Line

Date Issued: August 12, 2003
Expiration Date: August 12, 2008

Location: 9917 North Alpine, Machesney Park

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Dip/Spin Coating Line 71, 72 and 73 with Regenerative Thermal Oxidizer (RTO) Coating Line 74 with Dip Tank and Curing Oven E-Coat Dip Line

Phosphate Line Controlled by a Packed Water Scrubber

pursuant to the above-referenced application. This permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year of volatile organic material (VOM), 25 tons/year of combined hazardous air pollutant (HAPs) and 10 tons/year of each single HAP). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits issued for this location.
- 2. Pursuant to Section 215.205(b) of the 35 Ill. Adm. Code, the Regenerative Thermal Oxidizer shall achieve an overall reduction in uncontrolled VOM emissions of at least 81% from dip/spin coating lines 71, 72 and 73.

VOM Usage		VOM Emissions		
(Tons/Period)	(Tons/Year)	(Tons/Period)	(Tons/Year)	
14.6	159.4	2.82	30.3	

- ii. The limits above are based on maximum volatile organic material usage (VOM) assuming that 100% of VOM used is emitted and 81% overall reduction of the RTO (pursuant to Section 215.205(b). Material usage includes all coatings, thinners, clean-up solvents and any other VOM containing material.
- b. VOM usage as applied shall be calculated as follows:

$$E = \sum_{i=1}^{n} C_{i}B_{i}$$

Where:

- E = VOM usage from all VOM containing materials used on the dip/spin coating lines (lb/yr).
- C = The weight of VOM per volume of material (lb VOM/gal).
- B = The volume of each material as used on the coating line (gal/period).
- i = Subscript denoting an individual component.
- n = The number of different coatings delivered to the coating line.
- c. Compliance with annual limits shall be determined on a periodic (i.e., four weeks) basis from the sum of the data for the current period plus the preceding 12 periods (running 13 period total).
- 4. Emissions and operation of Line 74 shall not exceed the following limits:

Maximum Coating VOM	MOV	Emissions
(Lb/Gallon)	(Tons/4 Weeks)	(Tons/Year)
·		-
3.5	0.45	5.9

Compliance with the maximum coating VOM content shall be determined on an as applied basis excluding exempt solvents and water. Compliance with the emission limits shall be determined upon completion of each four week period and the annual emission limit shall be determined using the data from the last thirteen four week periods.

- 5. This permit is issued based on negligible emissions of particulate matter from the dip/spin coating line filters. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
- 6. The RTO shall be equipped with a continuous temperature indicator and strip chart recorder or disk storage for the RTO combustion chamber temperature. The Permittee shall retain all records of equipment operation and strip charts or disk storage for at least one year from the date of occurrence. These records shall be available for inspection by the Illinois EPA.

7a. Emissions and operation of the E-Coat Line shall not exceed the following:

MOV	Usage	Emission Factor	Emiss	sions
(Ton/Mo)	(Ton/Yr)	(%)	(Ton/Mo)	(Ton/Yr)
	_		·	_
14.3	143	3.3	0.5	4.7

- b. Compliance with the annual limits shall be determined from a running total of the previous 12 months of data.
- 8. Pursuant to 35 Ill. Adm. Code 215.204(j)(5), the coatings applied in the E-Coat dip line shall not exceed 3.0 lb VOM/gal of coating (minus water and any compounds which are exempted from the definition of VOM) as applied at each applicator.
- 9. This permit is issued based on negligible emissions of particulate matter from phosphate line controlled by a packed water scrubber. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
- 10. The emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act shall be less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result of this condition, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a Clean Air Act Permit Program Permit (CAAPP), and Section 112(G) of the Clean Air Act.
- 11. The Permittee shall maintain monthly records of the following items:
  - a. For the Coating Lines 71, 72, 73 and 74:
    - i. Material (Coating, thinners, and cleanup solvents) usage  $(gal/period\ and\ gal/yr)$ .
    - ii. VOM and HAP (hazardous air pollutants) contents of all materials used (lb VOM/gal and lb HAP/gal).
    - iii. VOM usage and VOM and HAP emissions from all VOM and/or HAP containing materials used on the dip/spin coating lines (lb/period and lb/yr).
  - b. For the E-Coat Dip Line:
    - i. DMEA usage for each product (tons/mo and tons/yr).
    - ii. Butyl Cello solvent usage for each product (tons/mo and tons/yr).
    - iii. DMEA wt. content for each product (lb/gal).

- v. VOM emissions with supporting calculations (tons/mo and tons/yr).
- vi. VOM content of each coating (lb/gal).
- 12. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA request for records during the course of a source inspection.
- 13. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
- 14. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency Division of Air Pollution Control Compliance Section (#40) P.O. Box 19276 Springfield, Illinois 62794-9276

 $\underline{\text{and}}$  one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency Division of Air Pollution Control 5415 North University Peoria, Illinois 61614

- 15. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year:
  - a. VOM usage and VOM and HAP emissions from all VOM and/or HAP containing materials used on the dip/spin coating lines 71, 72, 73 and 74 (lb/period and lb/yr).

b. VOM emissions for the E-coat dip line with supporting calculations (tons/mo and tons/yr).

It should be noted that the natural gas fired cure ovens are exempt from state permit requirements, pursuant to 35 Ill. Adm. Code 201.146(fff).

It should also be noted that this permit has been revised to incorporate  $Permit\ 00090043$ .

It should also be noted that dip/spin coating line 73 from Construction Permit #98120017 has been incorporated into this permit.

Please note that usage and emission limits have been changed for Coating Lines 71, 72, and 73.

If you have any questions on this permit, please contact Randy Solomon at 217/782-2113.

Donald E. Sutton, P.E. Manager, Permit Section Division of Air Pollution Control

DES:RBS:psj

cc: IEPA, FOS Region 2
 IEPA, Compliance Section
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## Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the metal parts coating plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. This is handling 308 tons of VOM per year. The resulting maximum emissions are well below the levels, e.g., 100 tons/year of VOM, 25 tons/year of combined HAPs and 10 tons/year of each single HAP at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

1a. i. Emissions and operation of dip/spin coating lines 71, 72 and 73 controlled by the RTO shall not exceed the following limits (Note: One Period = Four Weeks):

VOM Usage		VOM Emissions	
(Tons/Period)	(Tons/Year)	(Tons/Period)	(Tons/Year)
14.6	159.4	2.82	30.3

2. Emissions and operation of Line 74 shall not exceed the following limits:

Maximum Coating VOM	VOM	Emissions
(Lb/Gallon)	(Tons/4 Weeks)	(Tons/Year)
<del></del>		
3.5	0.45	5.9

Compliance with the maximum coating VOM content shall be determined on an as applied basis excluding exempt solvents and water. Compliance with the emission limits shall be determined upon completion of each four week period and the annual emission limit shall be determined using the data from the last thirteen four week periods.

- 3. This permit is issued based on negligible emissions of particulate matter from the dip/spin coating line filters. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
- 4a. Emissions and operation of the E-Coat Line shall not exceed the following:

J MOV	Jsage	Emission Factor	Emissions
(Ton/Mo)	(Ton/Yr)	(응)	(Ton/Mo)
(To	n/Yr)		
14.3 4.7	143	3.3	0.5

b. Compliance with the annual limits shall be determined from a running total of the previous 12 months of data.

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- 5. This permit is issued based on negligible emissions of particulate matter from phosphate line controlled by a packed water scrubber. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
- 6. The emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act shall be less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result of this condition, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a Clean Air Act Permit Program Permit (CAAPP), and Section 112(G) of the Clean Air Act.

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